Amendments to the Claims

Claim 1 (currently amended): ~~Reflectron~~ A reflectron (109) for use in a mass spectrometer comprising a plurality of reflectron electrodes (123a-123n) connectable to one or more high voltage power supplies (127) ~~characterised it that it is provided with~~ wherein means for changing the electrical potentials of at least some of said reflectron electrodes (123a-123n) is provided in order to change the shape of the electrical field inside said reflectron (109).

Claim 2 (currently amended): ~~Reflectron in accordance with claim 1 characterised in the it is provided with~~ The reflectron of claim 1, further comprising at least two sets of field resistances (131a-131n, 137a-137n) which can be connected one set at a time, or in parallel, or in series, between the reflectron electrodes (123a-123n).

Claim 3 (currently amended): ~~Reflectron in accordance with claim 2 characterised in that~~ The reflectron of claim 2, wherein one of said sets of field resistances ~~comprises~~ includes field resistances (131a-131n) arranged to produce a linear electrical field inside said reflectron (109).

Claim 4 (currently amended): ~~Reflectron in accordance with any of claims 2-3 characterised in that~~ The reflectron of claim 2, wherein one of said sets of field resistances ~~comprises~~ includes field resistances (137a-137n) arranged to produce an essentially quadratic electrical field inside said reflectron (109).

Claim 5 (currently amended): ~~Reflectron in accordance with any of claims 2-4 characterised in that~~ The reflectron of claim 2, wherein at least one of said sets of different resistances ~~comprises~~ includes fewer resistances than there are reflectron electrodes.

Claim 6 (currently amended): ~~Reflectron in accordance with any of the previous claims characterised in that~~ The reflectron of claim 1, wherein at least one set of field resistances (131a-131n; 137a-137n) is mounted on a movable rod (133; 139), wherein said rod (133; 139) is movable between a first position where said set of field resistances (131a-131n; 137a-137n) are in electrical contact with said reflectron electrodes (123a-123n) and a second position where said set of field resistances (131a-131n; 137a-137n) is not in contact with said reflectron electrodes (123a-123n).